EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	21887	(list queue)near (task or job or process or block)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:16
S2	21747	S1 and process$4	US-PGPUB; USPAT	OR	ON	2007/09/28 14:23
S3	7087	"718".clas.	US-PGPUB; USPAT	OR	ON	2007/09/28 14:24
S4	1296	S3 and S2	US-PGPUB; USPAT	OR	ON	2007/09/28 14:24
S5	865	S4 and schedul$5	US-PGPUB; USPAT	OR	ON	2007/09/28 14:24
S6	126582	(task job process block)near (order fifo sequen$5)	US-PGPUB; USPAT	OR	ON	2007/09/28 14:25
S7	334	S5 and S6	US-PGPUB; USPAT	OR	ON	2007/09/28 14:27
S8	11747	(switch or shift or interrupt$3 or exception)near event	US-PGPUB; USPAT	OR	ON	2007/09/28 14:32
S9	20	S8 and S7	US-PGPUB; USPAT	OR	ON	2007/09/28 14:32
S10	12	US-5777629-$.DID. OR US-5896141-$.DID. OR US-5918050-$.DID. OR US-6023738-$.DID. OR US-6049857-$.DID. OR US-6065071-$.DID. OR US-6081854-$.DID. OR US-6252600-$.DID. OR US-6437788-$.DID. OR US-6446186-$.DID. OR US-6518973-$.DID. OR US-6691180-$.DID.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/03 13:42
S11	0	process$3 near(indicat$3 index$3 demonstrat$4 prove sign$3 specify$3 predict$3) near memory near resource near (available accessible obtain$3)	US-PGPUB; USPAT	OR	ON	2007/10/04 13:21
S12	0	(indicat$3 index$3 demonstrat$4 prove sign$3 specify$3 predict$3) near memory near resource near (available accessible obtain$3)	US-PGPUB; USPAT	OR	ON	2007/10/04 13:21
S13	31	(indicat$3 index$3 demonstrat$4 prove sign$3 specify$3 predict$3) near memory near resource	US-PGPUB; USPAT	OR	ON	2007/10/04 13:21

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S14	10	US-20040187122-$.DID. OR US-20040160446-$.DID. OR US-20040187135-$.DID. OR US-5577250-$.DID. OR US-6342892-$.DID. OR US-6683085-$.DID. OR US-20030023831-$.DID. OR US-20030117406-$.DID. OR US-20040246257-$.DID. OR US-6742104-$.DID.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/04 15:27
S15	231	GOSALIA, ANUJ "B."	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/04 15:27
S16	231	GOSALIA, ANUJ	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/04 15:27
S17	21	(GOSALIA near ANUJ).inv.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/04 15:41
S18	7	(PRONOVOST near STEVE).inv.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/10/04 15:41
S19	12	"6,442,682"	US-PGPUB; USPAT	OR	ON	2007/10/05 14:26
S20	24	"5367637"	US-PGPUB; USPAT	OR	ON	2007/10/05 14:27
S21	1	"5367637".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 14:30
S22	1	"5950231".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 14:31
S23	0	"756200".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 14:40
S24	1	"5414826".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 14:49
S25	1	"6222550 ".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 14:51
S26	1	"6539464".pn.	US-PGPUB; USPAT	OR	ON	2007/10/05 15:27
S27	18	cache and paging and (sampling or recording) and (DMA adj buffer)	US-PGPUB; USPAT	OR	ON	2007/10/05 15:34
S28	230	pag$3 near memory near (task job process program)	US-PGPUB; USPAT	OR	ON	2007/10/05 15:35
S29	10	(indicat$3 determin$3) near memory near location near (task process job)	US-PGPUB; USPAT	OR	ON	2007/10/05 15:40
S30	0	S28 and S29	US-PGPUB; USPAT	OR	ON	2007/10/05 15:41

EAST Search History

Ref #	Hits	Search Query	DBs	Op	Plurals	Time Stamp
S48	0	(check$3 determin$4) near(require$3 need$4) near (memory space) near (present availab$6)near (prior before advance)	US-PGPUB; USPAT	OR	ON	2007/10/10 09:49
S49	0	(check$3 determin$4) near(require$3 need$4) near (memory space) near (present availab$6 ready)near (prior before advance)	US-PGPUB; USPAT	OR	ON	2007/10/10 14:35
S50	151	priority near boost$3	US-PGPUB; USPAT; EPO	OR	OFF	2007/10/12 13:36
S51	0	Invalid near DMA near page near fault	US-PGPUB; USPAT; EPO	OR	OFF	2007/10/12 13:46
S52	1	Invalid near DMA near buffer	US-PGPUB; USPAT; EPO	OR	OFF	2007/10/12 13:47
S53	1	(Invalid incorrect worng fault) near DMA near buffer	US-PGPUB; USPAT; EPO	OR	OFF	2007/10/12 13:47

EAST Search History

Ref #	Hits	Search Query	DBs	Op	Plurals	Time Stamp
S31	21053	memory near allocat$3	US-PGPUB; USPAT	OR	ON	2007/10/09 09:53
S32	103808	(indicat$3 index$4 determin$4 require$3)near (memory available)	US-PGPUB; USPAT	OR	ON	2007/10/09 09:55
S33	7539	S31 and S32	US-PGPUB; USPAT	OR	ON	2007/10/09 09:56
S34	10193	processor near (stop$3 halt$3 interrupt$3)	US-PGPUB; USPAT	OR	ON	2007/10/09 09:58
S35	403	S33 and S34	US-PGPUB; USPAT	OR	ON	2007/10/09 09:58
S36	207	(start$3 begin$5) near (task process job) near memory	US-PGPUB; USPAT	OR	ON	2007/10/09 10:00
S37	1	S35 and S36	US-PGPUB; USPAT	OR	ON	2007/10/09 09:59
S38	0	(check$3 determin$4) near if near (require$3 need$4) near (memory space) near (present availab$6)near (prior before)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:41
S39	0	(check$3 determin$4) near if near (require$3 need$4) near (memory space)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:38
S40	301	(check$3 determin$4) near(require$3 need$4) near (memory space)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:38
S41	94847	(memory space) near (present availab$5)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:39
S42	80	S40 and S41	US-PGPUB; USPAT	OR	ON	2007/10/09 16:40
S43	78	S42 and (prior before)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:39
S44	0	(check$3 determin$4) near(require$3 need$4) near (memory space) near (present availab$6)near (prior before)	US-PGPUB; USPAT	OR	ON	2007/10/10 09:49
S45	5	(check$3 determin$4) near(require$3 need$4) near (memory space) near (present availab$6)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:47
S46	5	(check$3 determin$4) near(require$3 need$4) near (memory space) near (present availab$6 ready)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:47
S47	5	(check$3 determin$4 indicat$5) near(require$3 need$4) near (memory space) near (present availab$6 ready)	US-PGPUB; USPAT	OR	ON	2007/10/09 16:48

determining an order for processing the tasks wherein the order accounts for any relative priority among the first application and one or more other applications and a corresponding amount of processing time that the first application and one or more other applications are entitled to;

preparing tasks for processing by ensuring that any needed memory resources are available in a memory location accessible by the coprocessor wherein the preparing tasks occurs in the order determined by the scheduler;

submitting tasks to the coprocessor for processing;

managing the coprocessor-readable memory to apportion the coprocessor-readable memory among the various tasks; and

providing a virtual address space for the tasks.

29.   A method according to claim 28 wherein the coprocessor is a graphics processing unit (GPU).

30.   A method according to claim 28, further comprising storing a task in a DMA buffer wherein the storing is accomplished by a user mode driver.

31.   A method according to claim 30, further comprising validating a memory resource referenced in a resource list that is associated with the DMA buffer wherein validating entails finding a range of coprocessor-readable memory that is free and asking the kernel mode driver to map a page table or a memory resource handle to that range.

32.   A method according to claim 28 wherein the virtual address space is virtualized through the use of a flat page table that divides coprocessor-readable memory into pages of a predefined memory amount wherein further a page table is provided in the virtual address space that contains identifiers for specifying coprocessor-readable memory addresses.

33.   A method according to claim 28 wherein the virtual address space is virtualized through the use of a multi-level page table that divides coprocessor-readable memory into pages of a predefined memory amount wherein further a multiple page tables are provided in the virtual address space that contain identifiers for specifying coprocessor-readable memory addresses.

34.   A method according to claim 28 wherein a portion of coprocessor readable memory is used to indicate whether all required memory resources associated with a task that requires processing are available in coprocessor-readable memory.